SARAWAK (1)

5 September 1987

Bernard, Lai, Donne, Jugah, JBB.

35 ml N. Bintulu W of Miri Road, c. 1 mile Similajau Forest Reserve logging concession SP1

Alt 100 m, 3°20'N, 113°25'E

Lowland mixed Dipterocarp f. on yellow clay.

225 Myristicaceae

Myristica inersa Bl

Tree 20 m 45 cm dbh

Bark smooth, flaky; buttressed 0.5 m

under bark red 2 cm thick

twigs reddish lenticels

Flowers P(3), orange, paniculate

TBK, TW, LF (3)

226 MYRISTICACEAE

Knema ? percoriacea

Tree 18 m x 35 cm dbh
Fluted base to 2 m
Bark reddish, very flaky
turning black
Underbark red, 1 cm thick

Flowers axillary clusters in
bracts with dense reddish tomentum
p 3, woody - hirsute reddish
brown

TBH., TW. LF. (3)

227 RUBIACEAE Randia

Tree 15 m x 25 cm dbh
fluted to 1 m
bark grey, powdery, thin <5 mm
easily peeled
Fruits green 32 mm x 35 mm.

No. 312

ovoid , inferior , smooth.

TBH , TW , LF. (3)

228 DIPTEROCARPACEAE

Vatica

Tree 25m x 50cm dbh.
bark. smooth , greenish grey.
1 cm thick fine longit fissures
with few flat tubercles.
u/bark red wood yellow.

flower P5 , 5-7 mm dia
reddish-brown tomentum

TOH TW LF (3)

229 EBENACEAE

Diospyros

Tree
20 m x 40 cm dbh

J. L. DARLING CORP TACOMA, WA 98421
"Pitz on the Roof" WEATHERPROOF

bark , black / brown / silver , rough
longit fissures flaking.
0.5 - 1.0 cm thick.
u/bark reddish , wood whitish

Fruit HT61 ? spheroid , 30 mm diam
transv/red tomentum

TBH , TW , LF , FR (4)

230 BURSERACEAE
Dacryodes.

Tree 15 m x 20 cm dbh
bark whitish grey , soft ,
longitudinal fissures thin ~5 mm

Flowers small (1-2 mm) white

TBH , TW , LF (3)

See 240 herb fruit

231 Ulmaceae Gironniera

Tree 20m x 25cm dbh

bark, smooth, greenish-grey waxy., 5mm thick, u/bk orangy.

Fruit, orange, ovoid two styles

TBK, TW, LF (FR?)(4)

Annonaceae Polyalthia

232 Tree 15m x 25cm dbh fluted at base - 2m

Outer bark corky, brown, fissured, inner bark yellowish with black longit, raised markings, pale thick, >1cm, 4/bark orange

~10 free carples 25 x 15mm ovoid, pink with red streaks longit

TBK, TW, LF, FR. (4)

No. 312
J. L. DARLING CORP. TACOMA, WA 98421
"Rite in the Rain" WEATHERPROOF

233 Annonaceae

Mezzettia

Tree 20m × 90 cm dbh
Bark, thick ~ 2 cm reddish
Longit fissures
Fruits ovoid 55 × 50 mm
slightly flattened longit
smooth green,

TBR, LF, TW, (3)

* Gibbons, barking deer
"peacock" (heard)

6 Sept. 87

234 MORRACRAK

Artocarpus odoratissimus

Tree 15m x 30cm dbh

Bark, brown, thick (15mm)
roughly pock-marked & fissured

Fruit dull orange 10cm dia

Seeds bright orange 15mm long

TBK, LF., TW, FR(4)

235 FAGACEAE

Castanopsis

Tree 25m x 80cm dbh

buttressed to 2m

bark grey, flaky, vertical
lines of brown lenticels

Fruit , head 4cm dia green

TBH , LF , TW . FR(4)

236 MYRISTICACIEAE

Knema

Tree 20m × 30cm

Bark reddish brown 5-10 mm
dark red exudate
flaky

Flower P(3)
reddish - brown tomentum

—

TBH , LF , TW. (3)

237 Anacardiaceae

(1) Gluta

(Toxic) 'Rengas'

Tree 30 m x 50 cm dbh

bark smooth grey, longit fissures

wood red white

Flower greeny-white

Fruit 5 winged (60 mm long)

Fr. ovoid 15 m long

TBH, TW, LF, (3)

238 BOMBACACEAE

Durio

Tree 25 m x 45 cm dbh

bark rough, reddish brown

longit fissures, 1 cm thick

wood reddish.

Fruit, spines ~ 1.5 cm
Fr. 12 cm long ovoid
orangey
and red.
FR, TBK, LF, TW (4)

239 SAPINDACEAE
Nephelium lappaceum L.
Rambutan

Tree 10 m x 20 cm dbh
bark reddish brown with small
flakes and tubercles
thin < 5 mm, ubk orangy red

fruit 3 cm dia
soft spines ~ 15 mm
pinkish red

TBK, TW, FR, LF, (4)

240 BURSERACEAE
Dacryodes (cf 230)
FR, pink-red

(1)

241 MONIMIACEAE
Hortonia [illegible]
Mantaloa

Tree 25 - 30 m x 40 cm
buttressed to 1 m

bark corky, reddish-brown
u/bk [illegible]
thick white sap

Fr. Orange - 15 cm diam
obovoid
seed with orange aril

TBK, LF, TW, FR (4)

242 MYRISTICACEAE
Horsfieldia

Tree 30 m x 35 cm dbh
bark reddish brown
7 cm thick tangential groove
- thick flaking scales
inner bark, red exudate

Fruit ... , red - 3 cm long

Tree , LF , TW (3)

243 EUPHORBIACEAE
Bocquetia

Tree 10m x 15 cm, dbh
bark grey, ...
soft pliable, ... stripe
thin, papery, dry.

fruit, flattened spheroid, pink
3 grooves 25 mm dia
seed with bright blue aril

LF, TW, FR, (3)

7 SEPT. 87.

244 Tree 10 m × 15 cm diam
bark smooth with reticulate cracks
greenish-grey u/b orange, 10mm thick

Fruit 7-8 free in pale
ovoid 40 × 25 mm, ± 10 mm stalk
pericarp , orange

ANNONACEAE
Miliusa
TBR , TV , LF , FR (4)

245 Tree 20 m × 40 cm diam
fluted to 1m ,

bark with many layers flaky-
ritidome orange-brown
u/bk red 7mm thick
wood yellow
Fruit reddish brown tuberculate
head , oval , 3cm long

Kostermans Perinari
TBR , TV , LF , FR (4

246. MORACEAE

Artocarpus integer

Tree 15-20 m x 30-50 cm dbh

inner bark orange, brown, bright
orange - flakes
inner bark red
wider bark orange
white latex exudate

Fruit cauliflorous, oblong
20 x 10 cm
seeds in yellow pulp

TBH, TH, LF, FR (4)

247. BOMBACACEAE

Durio

Tree 30 m x 60 cm dbh
buttressed to 1-2 m
bark reddish-brown, rough

tubercular [illegible]
sorghy [illegible]
w/bk, red [illegible] + wood [illegible] reddish

Fruits up to 10 [illegible]
spicidal
w/ yellow pulp

TBH; TW, LF, FR (4)

248 * PANDANACEAE

Freycinetia

5 m [illegible] Ch. +
Infl. reddish brown

HERB

249 FAGACEAE

Castanopsis

Tree 12 - 15 m x 45 cm
fluted to 1.5 m
bark reddish-brown flaking
5 mm thick, u/bark reddish

fruit, abundant, mid-green

FR, LF, TW, TBK (4)

250 SAPINDACEAE

Pometia

Tree 30 m x 40 cm dbh
buttressed to 1.5 m
Bark smooth, grey, 2.5 mm
reddish u/bk rugose

fruit [illegible] green
[illegible] 12mm long

FR TBK, TW, LF 4)

251 MELIACEAE

Tree 30m x 35cm bgh

bark brown (reddish)
10mm thick smooth - powdery
inner bark and white latex
wood red.

flower small c. 1mm dia buds
in rusty furfuracee pedicels
yellow-green.

TBH, TW, LF, FL. (4)

252 FLACOURTIACEAE
Lithocroton

Tree, 35m x 60cm
~~bole~~ bgh 1.5m.

bark grey, rough, ~~fissured~~ to
white wood 16mm thick

Fruits [illegible], 15 mm dia
dull [illegible]

TBK, TW, LF, FR (A)

253 DIPTEROCARPACEAE

Dipterocarpus

Trec ~40m x 50m dbh
b-thread to 1 m
bark smooth to scaly, reddish-brown
[illegible] (~1 cm dia) corky
[illegible], slightly flaky

Fruit 2 winged nut
30 mm dia, 5 longer
150 mm, red

3 @ 5 mm
TBK, TW, LF, FR (A)

No. 312

8 SEPT 1957

254

Nephelium

Tree 10 m x 15 cm dbh

Bark smooth, grey

Fruit 5 cm long, red

TBR, TW, LF, FR (4)

255 ULMACEAE

Gironniera

Tree 15 m x 25 cm dbh,

Bark light brown, tuberculate with transverse ridges, 6 mm thick

Fruit ovoid, 12 mm long

2 nuts to 15 mm long

dull orange when

TBR, TW, LF, FR (4)

256 LEIC – NOTOT.

Dainui, Hidden Valley

Tree 35m x 45 cm dbh
buttressed to 1.5 m
Bark reddish-brown, tuberculate
u/bark red. 5-7mm thick
wood sea orange-red.
bright red exudate
Fruit obovoid 2.5 cm long
x 1½ cm dia, dark brown
tomentose

TBH, TW, LF, FR (4)

257 FAGSCI – Fuscospora

Litho campana

Tree 35 m x 80 cm dbh
buttressed to 1.5-2 m
o/bark rough, longit fissures & flaking
l/bark red u/bark orange 15 mm

Fruit grey-green 40mm dia
silky [illegible]

TBK, TW, LF, FR (4)

258 [illegible]

Pasture

Tree 35-40m x 45cm dbh
B [illegible] to 1m
Bark reddish brown / orange
cracky, flaky w/ bk red.
wood [illegible] red.

Fruits 5 winged red
Flowers white 5 merged 10-
dia: cauliflorous

TBK TW. LF. (3)

259 DILLWYNIACEAE

Tree 20 m × 35 cm dbh
Outer bark brown, flaking, light
fissured; inner bark red
under bark yellow, wood dark
red

Flower 5 mm diam. P 5
imbricate red outer, yellow
inner 5 mm diam, fragrant
yellow? stam. white
purple staminate
red 7 - lobed stig.

TBK, TIN, LF, FL. (4)

260 DIPTEROCARPACEAE

Shorea

Tree 35 m × 400 cm dbh
buttressed to 1.5 m

Each [illegible] red-brown
with [illegible], longitudinal grooves
4/6h mango yellow, 10 mm thick
10mm 5mm
F: 2 types 2 sizes mixed
green - orange, fine texture
8-10 mm dia spherical

TOTAL, TW, LF, FR (W)

261 *

1

Distribution: HERB

m 259 - [illegible]
yellow [illegible] = fruits
2-4 cm - pod with sides
[illegible], small (1mm dia) yellow

262 FALCONER

Lithocarpus

Tree 35 m x 50 cm dbh
branched to 1 m
Bark [illegible], grey-brown

tubular lobes, all flukes
15 mm thick
u/bk red, wood red

Fruits 5 [illegible]
conical 10-12 mm long

TBR, TW, LR, FR (4)

263 EUPHORBIACEAE

Baccaurea angulata

Tree 10m x 20cm dbh
Bark soft, fruits 10mm thick
stem outer, yellow under /u

Fruit 6-sided, waxy
candle wax red, cauliflor
ovo

TBR, TW, LR, FR, (4)

10 SEPT 1987

264 LAURACEAE

cf Phoebe

Tree 15-20 m x 40 cm dbh
Bark, brown, soft, flaking?
u/bk orange 10 mm thick
wood yellow

Flower buds greenish yellow.
3-4 mm dia.

LF, TW, TBk. (3)

265 LEGUMINOSAE

Dalbia

Tree 35 m x 70 cm dbh
buttressed to 3 m.
Bark, shiny-grey, scaloid,
± smooth wood yellow
ubk red, red exudate

Fruit 50 x 30 cm,
oval, pointed, black

TGA, LF, TW, FR (4)

266 VITIACEAE

Cissus

N. China — to 5 m or tree
leaves to 10 mm dia.
Heart-shaped
Leaf → tendril
Flower P4 green, yellow disc
20°, Fruit margin ± round

LF + TW, FR, STM (BT+WD) (3)

267 FAGACEAE

Lithocarpus

Tree 30 m x — 5 cm dbh
buttressed to 1 m

K. [illegible] grey [illegible] brown,
[illegible] with [illegible] longitudinal
[illegible] of raised tubercles
w/bands of grey-red, [illegible] the
wood which - pale on
fruit ovoid, apiculate
smooth green, glabr...
20mm x 16 [illegible].

LF, TSth, TN, FR (1)

268 Lo-Mt-[illegible]-Forest

Stag. crest

W. Cli. [illegible] brown, stem 2.5 cm
Fruit to 6 cm, green
ophiolite

FR, LF, TN (4)
SE+SW

Toxic - blue [illegible]

269 Myristicaceae

Myristica

Tree 35m x 45cm dbh
Trunk fluted / buttressed to

L.Ex. ; Bark dark brown
flaky ext 15mm thick
u/bk red, with red
exudate blood orange - red

Fruit ovoid 40mm x 30m
orange, fibrous

TBK, LF., TJ, FR (4)

270 Apocynaceae

Willughbeia

Woody climber to 15m
on tree 20m to 50 mm dia
Fruit 8 cm diam, round, orange

edible pulp on 1 male
milky white latex

STM, JW, LF, FK (4)

27: DILLENIACEAE ?
FLOWERS ?
? Dillenia

Tree 20m × 20cm dbh
Bark grey, slightly
rough + flaky
u/bk orange from the L
wood yellow - orange

Flower ♂ white
A ∞ white, filaments
no bracteoles
anthers brown

TBT, JW, LF, FK (4)

272 ANNONACEAE

Fissistigma

Woody climber - 5m
stem - 30 mm dia

hairy tendrils

fruits 2-5 free carpels
green 30 × 20 mm wood.

STM, TW, LF, ER (4)

(32)

No 312

11 SEP 87

273 FLACOURTIACEAE

Hydnocarpus

Tree 35 m x 45 cm dbh
Bark grey smooth, 10 mm thick
Fruits spherical 120 g
velvety dark brown tomentum

TBR, TW, LF, FR (4)

274 OLACACEAE

Ochanostachys

Tree 35 m x 65 cm dbh
Trunk buttressed to 2 m
Bark, smooth tight reddish brown scaly bird

Fruit ... mm ... spherical
receptacle ... milk ... latex

TBE, TI, LF, FR, (4)

275 URTICACEAE

P...

Epiphyte

Shrubby, ... x

Fl... on pink, receptacle
minute white perianth

TW, LF, FL (2)

276 MYRISTICACEAE

Myristica

Tree 25m x 30cm dbh
Bark dark brown, flaking
wood red with red exudate
14mm thick

wood reddish

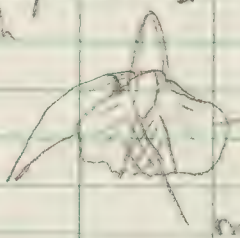
Fruit ovoid 90 × 60 mm
green, [illegible] → orange when ripe

TBK, TW, LF FR (HC)

277 Zingiberaceae
Ochrosia / Neisosperma
Stem is 7m, latex

Fruit oblong 20 × 15 mm
orange (yellow)

Flowers, on spikes from
base of plant c 20 mm long
yellow with
orange
stripe




STM, LF, FR, SM (20MC + L)
ROOT

278 GUTTIFERAE

Mesua

Tree 25m x 30 cm dbh
Bark grey & brown, flaking & fissured
u/bk red, c. 8mm thick
Flow 40mm dia white
'Fruit' green, 16mm dia
& sticky exudate

TBK:, TP, LF, FR. (4)

279 EBENACEAE

Diospyros.

Tree 20m x 20cm dbh
Bark grey, rough with fine longitudinal fissures
u/bark orange, 5mm thick
wood yellowish-orange

Fruit flattened spheroid.
60 mm diam, orange
on base, velvety disk/calyx.
Seed with purplish gelatinous
aril.

TBK, TW, LF, FR. (4)

280 BURSERACEAE

Tree 35m x 40 cm dbh

Bark silver-grey, scales
ubh orange 5 mm thick
wood white

Flower, F(B) C3, white
fragrant,

TBK, TW, LF, FR (4)

281 RUBIACEAE

Woody climber, stem 40 mm dia
to 20 m long SD.
Fruit, orange berries

TW, LF, STEM (BK + WOOD)
FR (4/6/3)

282 ELAEOCARPACEAE

Elaeocarpus

Tree 35m x 70cm dbh
Trunk buttressed to 2m
fluted to 4 m
O/ Bark reddish brown
reticulate fissures
inner/dead red } 15 mm
under bark yellow

many small pom pom clusters (red
flowers 4 mm long

TBK, TW, LF, FL (4)

12 SEP 1982

283 Postscript

Parastemon

Tree 30 m x 30 cm dbh
d/Bark grey, flaking
u/bark red. 4 mm thick

Fruit obovoid, 8 mm lg.
green, Flowers greenish white
with yellow disk 2-3 mm lg

TBR, Tre, LF, FR (H)

284 Tilacoreae (PHOTO)
Stomatic junction

Tree 35 m x 60 cm dbh
buttressed to 3 m
Bark reddish brown smooth
slightly fibrous ± flaked
u/bk orange, 5 mm thick

Fruit ovoid ; 75 x 55 ...
reddish - orange, fairly
indistinct pink seed surface
PHOTO
TBK, TD, LF, FR. (4)

285 APOCYNACEAE

Tabernaemontana

Tree 10m x 20cm diam
Bark light brown, rough
scaly & fissured
coppice shoots with
w/brown pale orange lenticels 10mm.

Flower bud 20mm long
orange (PHOTO)
Fruit sphere 13cm diam
orange
mesocarp orange endocarp white

TBK, TD, LF, FR (4)

286 BURSERACEAE

Tree: 15m x 25 cm dbh

outer bark: fast, corky, flaky?
inner bark: smooth, dark brown
u/bark: orange red 4mm thick
wood: white
Fruit: oblong 30 x 20 mm
orange coloured with white latex
TBK: TG, LF, FF, -

287 DIPTEROCARPACEAE

Vatica

Tree 20m x 25 cm dbh

Bark: silver-grey with fine
bright specks, upper orange-brown
wood: yellow-light brown
Fruit: winged, 5 petals
35 mm diam.

Flower ... Axil ... yellow

TBR, TW, FR, LF. (4)

288 ANNONACEAE

Polyalthia

Tree 25 m x 25 dbh

Bark ... with ... brown and grey ... powdery ... flaked.

Wood ... light ... 10 ...

Flower P6 green, 40 mm dia.

Fruit ... black, ... spheroid 25 mm dia. 4-6 per ...

TBR, TW, LF, (7)

289 CELASTRACEAE

Bhesa paniculata

Tree 20 m x 30 dbh

s/Bank light brown, smooth or finely lobe-crenulate, 6mm thick inner b/l orange, u/bank yellow.

Thin ca 1-2mm thick yellowish green

TBT, TW, LF (3)

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19 SEP 1987

Kuantan region, North bank of Sungai Telah about 1½ NW Nilai Base Camp.

Disturbed Alluvial forest, wet, clay soil.

4° 00' N 114° 50'

(just outside park boundary)

290 Balanophoraceae

Dactylanthus

Tree 15m × 35 dbh
Bark reddish brown ± smooth
6mm thick wood white
u/bark reddish
with purple tinge
Fruit 1 green oblong
25 × 12 mm with yellowish-
green (?) glands
white latex from twigs
TBR, TW, LF FR (H)

291* MONIMIACEAE

Figure:

Epipolythrix simplex on 290

Inflorescence bracts white
woolly, on ♂ tree
HERB

stamens

292 POLYCARPICAE

Xanthophyllum

Tree 10m x 30cm dbh

Bark light grey, thin (3-4mm)
stringy ± tuberculate

Fruit spheroid 1.5cm diam
green with matte brown
faint

Fleur, minute, [illegible]
axis

Tok, TW, LF, FR, [illegible]

293 MYRISTICACEAE

Gymnacranthera [illegible] of extracts

Tree 20m x 35 dbh
reddish brown, slightly flaky, 1.5cm
w/be orange reddish exudate
Fruit, apocarpous, globoid
with many [illegible], ovoid 1.5cm

Tok, TW, LF, FR [illegible]

294 LAURACEAE

Eusideroxylon

Bilian

Tree 20m x 60 cm dbh
Bark dark brown, flaky ...
Sap ... wood ... heartwood ...

Fruit ellipsoid 80 × 40 ...
glabrous, green, hard

Tim: T+, LF, FP (4)

295 DIPTEROCARPACEAE

Shorea

Tree 25 m x 80 cm dbh
Trunk buttressed to 2 m
Bark reddish brown, flaky
with many light lines (corky)

Clusters of 3–4 disc florets, 20 mm diam
(w/bract
~ inner bracts blood red

Flower — creamy G-yellow, 4 mm long, C yellow 6-10 mm long

TOK, T 1, LF, FR (4)

296 EUPHORBIACEAE

Glochidion

tree 15 m x 25 cm diam

Bark brown, smooth, fissured, flaky
scaly
WBK red, 3 mm thick
wood white

Fruit splayed, green
(dk styles, 2 black, 3 mm
dia

TOK T 1, LF, FR, (4)

293 Euphorbiaceae

Apoutia

Tree 15 m x 30 cm dbh
Trunk straight
Bark reddish brown ±
shaggy in patches & thick
w/ dbh reddish orange

Fruit yellowish green
round 1-2 mm dia P K

Tree, Trunk, Leaf, Fruit 4)

298 Anacardiaceae

Polyalthia

Tree 25 m x 60 cm dbh
trunk fluted to 1.5 m

Bark brown smooth 10 mm
w/ bumps orange yellow

Fruit [illegible]
, seed, 12 cm. long
longitudinal

TBK, JW, LF, FK (4)

299 SYRACUSE, NY

Nebula.

Tree 20m x 4.5m Mt
Trunk with watery roots
to 0.5m - 1m.
Bark [illegible] tuberculate
deeply ridged [illegible] 5m. thick
ubk, magenta red
Fruit [illegible] c 10.
l.w. pale green

TBK, TH, LF, VF, RL

20 SEP

Undisturbed Alluvial Forest

300 GONIOSTYLACEAE

Genus: Tolua

Tree 20 m × 40 cm dbh
Bark, dark red soft
corky with longitudinal fissures
c 12 mm thick, w/ bk orangy
yellow, wood pale

Cymule ♂ infl. with
yellowy fruits
P(3) green, fleshy, 2 mm long
A yellow.

TBK; TL, LF, FL + FR
(4)

301 MELIACEAE

Amoora

Tree 25m x 55 cm dbh

Bark light grey-brown slightly flaky with longitudinal line & raised lenticels; 10mm thick w/bk reddish with white latex; inner red

Fruit G(3) nuts in... white latex

TOK, Tu, LF, Fr (4)

302 CELESTRACEAE

Lophopetalum

Tree 20m, 50cm DBH

Trunk fluted at base to 2m

Bark grey-brown ± smooth ... 8-...

W/ bark orange

Rec

Flow orange with yellow
perianth border 2 [illegible] tubes
10 mm dia, dk, dk orange
+ anthers

musty fragrance

TBR, T, LF, FR (4)

303 BURSARIACEAE

Common ?

Tree 30m x 60cm dbh

Trunk buttressed to 1m

Bark [illegible]

Fibrous [illegible] with raised
reticulate pattern, 12 mm th.

W/ bark orange, wood red

Fruits elongated green

TBR, T, LF, FR (4)

304 SAPOTACEAE

Pulasiphon

Tree 30m x 60cm dbh
Extrac 4m to branch, to 2m
Bark brown, rough, corky flakes
w/ brick red, white latex
1.2cm thick

Fruit immature

TBK, TV, DF, FR (4)

21 SEPT

200 m E of New base camp

305 PANDANACEAE

2-3 metres spirally
branched crown of fine

Pisp. rocks in 30 cm

Shale at base, 15 cm gray

2.5 cm dia.

---

30 SEPT 1987

MARANG (proposed) NAT PARK

G Barisan, 5 ≤ Ma

C Serapot summit N10E

Sub Montana formn

or yellow podzol

sandstone & shaley bedrock

2500 ft

1° 32' N 110° 12' E

306 Pinus radiata
(2500')

Pondhouse ?

Terrestrial c 1 m tal.
under leaves, glaucous green
upper dark green
Fruits immature to 4 cm
long

Herbarium spec

307 Thermogene

Coordinates in ? Scheme

Tree 10 m x 15 cm dbh
Bark rough, soft corky flaking
reddish 2 mm thick
w/brash Phloem, yellowish
o/wood yellow

Flow- C ... 20-25cm
dhá cream white A sa
yellow filaments
slightly multi-lobed

Fruit (1 only) ha
reddish-brown capsule, fleshy
hairy 15mm diam. 5 ridged
plate.

TBK ... Tw ... LF [3]

308 IN YATACUNA

Treatment anomala

Tree 8m ... 10m x 50cm
Bark ... corky ridges fissures
Z ... flaky, reddish brown
white yellowish

Flower ... 1-2 cm
on ... white ... yellow

309

210 IXONANTHACEAE

# Ixonanthes

Tree 12 × 30cm dbh

Trunk fluted at base to 1m
Bark dark reddish brown
[illegible]
[illegible]
underbark reddish, of wood [illegible]

Fruit dehisced [illegible]
[illegible] capsule 25mm
long with persistent calyx
reddish-brown colour

TBT, TW, LF (3)

311 ULMACEAE

G. ingens

Tree. 10m x 20cm dbh

Bark light brown, thin (4mm) ± smooth, slightly powdery surface. U/bk yellow

Fruit ovoid, orange. 2 styles

TBK, TW, LF, FR (4)

312 EUPHORBIACEAE

Gelonioideae

Tree 8m x 15cm dbh

Bark reddish brown, rough flaking 10mm thick

u/bk red

Flange | P.c. | greenish
white | walls | pink | base
6 mm dia.

TBT, TL, LF, (3)

313 LECANIDOSIDE

Ormosia.

Slender | Inlet | 5 m
x 10 cm dbh

Bark finely | dissected | by cracks
with large (c. 5 mm dia.)
waxy | lenticels | brown,
w/ bark | [illegible] | [illegible]
< 5 mm. | Twigs | [illegible] | brown,
[illegible]

Petiole | brown, | [illegible]
[illegible] | [illegible] | [illegible]
deflexed | [illegible] | 2 valves
to 3-4 m | [illegible]

TBT, TL, LF, (3)

(2a) [illegible]

No. 312

1 OCT 1987

250 m NW of col between G. Bawang and G. Serapi
Slope, with S.W. aspect
2200, (near camp.)
upper MDF

314 THEACEAE

Adinandra

Tree 8m x 15 cm dbh
of Bank reddish brown and
with many prominent, lenticels
5 mm thick
inner bark red, under bark
yellowish

Flower buds imbricate
conical, 'apiculate', white

TBH, TW, LF (3)

a Col between G Sonya c
G Banner, SW aspect.
edge of clearing 2,200'

315 SIMMONDSIA CHINENSIS

Scammon

Tree 7m x 18 cm dbh
Bark green
Ends smooth
Time of flowering

Fruit spherical, green
Fr label style a persistent
calyx Ht. 10 mm dia
borne on old stem
TBK, LF, Tol. Fr (4)

316 Tree: [illegible]

Habitat: [illegible] cordyfolia

Tree 12 m x 30 cm bbh

Bark reddish-brown, (corky outer) pronounced dark longitudinal inner bark red, 20 mm thick u/bark cream-grey-red.

Fruit spherical 15mm, on style: ovoid pendant green, 15 mm dia

+ Flower buds & flowers 25 mm dia C5 interspersed TBK, TW, LF, FR+FL. (4)

* [illegible] white ovoid

A flattened, reddish brown

S side of [illegible] steep gully [illegible] 220m

317 FLACOURTIACEAE

Hydnocarpus

Tree 20m x 45 cm dbh.
Trunk fluted / buttressed to 1m
Bark grey-brown, slightly rough

Fruit spherical 10cm diam
grey-brown with pale lenticels
woody

TBT, TIJ FR, LF (L)
on slope S aspect

318 DIPTEROCARPACEAE

Vatica

Tree 25m x 30cm dbh
Bark ± smooth, orange-red patches of flaking grey-grey outer bark inner bark orange-red

u/bark yellow. 10cm thick
wood yellowish - white

Fruit 5 cm dia, spherical.
15mm thick, scaly on
brown surface

TBT, LE, TW, FR (to)
Flower minute (c. 1mm dia.)
grouped at ends of branchlets

319 MENISPERMACEAE

Bigiocaffino

Tree 25m x 50cm dia.

Trunk buttressed to 2m

Bark grey-brown, rough

Latex
u/bark white with orange
streaks 15mm thick

Wood yellowish

Fruits [illegible]
10cm dia, [illegible]
coloured

TBR, T.S., LF, FR (4)

PHOTO

320 LAURACEAE
? Cryptocarya

Tree 20m x 50cm dbh
Trunk buttressed to 2m
Bark grey, soft corky
outer layer, 15mm thick
u/bark reddish.

Flowers yellow 2mm dia
greenish. Male panicles.

TBR, T.S., LF (3)

Fruit obovoid, green
48mm long x 30mm dia

321 LAURACEAE

4. Phoebe

Tree 20 m x 40 cm dbh

Bark white-grey, flaking
10 mm thick
w/ bands of dull pink
chalky underbark

Flower, wall green [illegible]
buds 12 mm dia on very
white pedicels

TBA, Tw [illegible] Fr (4)

322 LORANTHACEAE

Lysiana ?

Parasitic on large tree

Flowers red C with tube
ie 50 mm dia

narrow pinnae, 2 H
long (of ♀) flowers orange
Mixed with blue
Style 20-20mm long red
peduncle orange

T.O., LF, FL (+)

STM (Beech + Hemlock)

2 OCT 1957

Disturbed upper MOF
2150', near road
NW of Cell between
G Beauty & G Imogi.

323 SONNERATIACEAE

Duabanga moluccana

Tree 12m x 15cm dbh

Bark silver-grey with large (~8mm wide) reddish lenticels, u/bark reddish tint

Fruit in 4's on bel, 1½ persistent, 1½ x 4cm long

TBK, TW, LF, FA (4)

324 LOGANIACEAE

Fagraea

Shrub, 4m, ♀ stem 5cm thick, grey

Subuniform

Flower C (5); [illegible]
recurved BD — dia
tube LTD — [illegible], white

LF + FR, TV, STM (PR + AP)
(3)

325 [illegible]

Eucalyptus

Tree 8m x 10cm dbh

Bark light-brown with
transitional ridges and
cracks.
w/bark reddish.

Fruit, in 4's green, spherical
2-3 mm dia

LF, FBT, TV, (PR)
(3-4)

2000'

326 RUBIACEAE

Mountain

Tree : 10 m x 25 cm dbh
Bark reddish-brown with
homogeneous indges & furrows
u/bk reddish & smooth
Flow , &O nm dia
globose , yellowish green
fragment , PHOTO

TBK , TW , LF , FL (L)

327 LOGANIACEAE

Fagraea racemosa

Tree 8 m x 7 cm dbh

Bark grey lk rough
longitudinal cracks
yg twigs glabrous

~ 50 m

Flower campanulate
tube 4.5 mm, C-shaped
3.5 mm diam, white, dry
racemose (PHOTO)

Fruit ovoid, 15 mm diam
green with white glands.

TBK, TW, LF, FL+FR (4)

328 THEACEAE SL

Ploiarium

Shrub + disturbed place,
roadside, 1,500'

4 m.

Fruit reddish, fissured
capsule, opening 5 locules
TW, LF, FR+FL, ST Bt (4)

obtd. Flow C ~ with
with pure methanol for bed
A ∞ , 30 min. dur

14 OCT 1987

Brau Bidr, 3 km
SSW of [illegible] township
Steep rocky [illegible] cliffs / p
W aspect [illegible] metamorphosed

Alt 500'
Lat 1°22' N Long 110° 7'E

379 Logan Rec

Fagraea

Tree / shrub 3 m - 10 m
dbh [illegible] young [illegible]
[illegible] in cliff

Bark grey with raised
[illegible]
u/bk yellow

Fruit green, globose
with apiculate apex
3.5 mm diam, sticky [illegible]

FR ; T.W., STM BK, LF, (4)

330 Anacardiaceae

Gluta / Melanochyla

Tree ; 10 m x 20 cm dbh
Bark reddish brown, fib
-longitudinal grooves 5 mm wide
, w/bk reddish

Flwr , CS , pinkish
white with yellow centre
+ 12-14 mm dia , recurved

? Toxic / irritant

TBH , T.W. , L.F. , FL (4)

331 Ochanostachys 60'

Icacinaceae

Tree 2 m x 20 cm dbh

Bark [illegible]
w/bl [illegible] yellow

Fruit 5-[illegible]
[illegible]

TB[illegible] TJ LF (3)

332 [illegible] 650-17

Palaquium

Tree 10 m x 25 cm dbh
Fruits buttressed to 1.5 m
Bark grey-brown, flakes
w/ bl red, with white
latex exudes 10 mm thick

Fruit [illegible], orange
up to 20 mm diam
[illegible]

TBR , LF , TI , FR
(+)

337 MELIACEAE 530'

Aglaia

Tree 8m x 25cm dbh

Bark + wood reddish-
brown, aromatic

Inflorescences in axils of
young leaves

in axils of 6th from shoot
TBR , TI , LF (2)

15 Oct 1985

Jamburan 2-3 km SE
of Bass

Imotive cliffs & pinnacles
W aspect, 250 ft

334 MELIACEAE

Chisocheton

Tree 8m x 30 cm dbh

Bark brown, patchily
with small lenticels

W/ blk yellowish

Flwrs cauliflorous, red

Fruit obovoid, apiculate
green with reddish tint

to 30 mm diam

TBR, TJ, AC (3)

335 ANACARDIACEAE 30'

Melanorrhoea

Tree 12m × 30cm dbh

Bark brown with grey patches
Outside to 5mm thick
u/bark orange; base black

Flowers green from stem
no load. White latex

TBR, TJ, LF, FL
Ranges Tonga (restricted)

- base of tree.

336 RUBIACEAE 20'

Nauclea

Tree 15m × 45cm dbh
trunk fluted to 1m

Bark [illegible]

[illegible] yellow

[illegible] 30-35

[illegible]

TBK, TWI, LF, FL (4)

337 ANACARDIACEAE 200'

Pentaspadon

Tree 18m × 40cm dbh

Bark reddish brown

± smooth, v. dark yellow.

10 mm thick

Fruit [illegible] pointed yellow

green [illegible] brown

[illegible] 30-35 mm long

TBK, TWI, LF, FL (4)

338 *fr* PANDANACEAE 200'

Pandanus

2 - 3 m tall, spreading
branched from base
leaves whorled to ground
level

HERB only

339 ANNONACEAE 200'

Cyathocalyx

Tree 7 m x 20 cm dbl
Bark dark brown ± smooth
n/bk orange, 8 mm thick

Flower green, C 5 fused
up to 6.5 cm long, unequal
Fr ovoid, apical, 4 seeded
lemon, fleshy 30 mm long
TBH, 2F, TW, (I)

340 SIMAROUBACEAE

Quassia amara

Tree 15 m x 35 cm dbh

Bark 6 mm [illegible] with small (1 - 2 mm) [illegible] lenticels slightly rough

Twigs 7 mm thick with orange [illegible] on pale, yellowish green, 2-3 mm dia

TBK; T:1; LF (D)

(403)

17 OCT

Swamp forest 3 km SSW
of Lundu, near Batang
Kayan River
1° 33' N 109° 51' 20" E

341 GUTTIFERAE

Calophyllum

Tree 20 m x 40 cm dbh
Trunk with prop-roots to
1.5 m

Bark reddish brown, pale
corky, flaking, y/brown

Sap reddish, thick
exudate yellow

Flower white, scented, petals
15 mm long, Ø ∞ stamens
yellow, ovary, green

TUK, TW, LF, FLH

342 [illegible]

Physitron

Tree 2cm x 3.5cm diam

Bark grey-brown with
longitudinal ridges,
branches with
4mm thick

Flowers in
[illegible]

TBR, TW, LF, F< (4)

343 [illegible]

Stenocarpus

Tree 15m x 25cm diam

Bark [illegible] longitudinal

ground & tube-like

6mm thick, w/ black margin

Flower, reduced, yellow tube
~~th~~ 5mm long with
5 feathery clefts
6 stigma A

Fruit, brown shrivelled
45mm long pear-,

TBR, TV, LF, FL H)

344 Euphrasia sp.

Bracteoles lanceolate.

Tree 10cm x 15 cm. Much

Bark, red-brown thin
(2 layers) flaking.
w/ black rod

Flanged, rounded (2mm) to
rim, edge to [illegible] 5th indented in
yellow ware

TBT, TJ, LF (3)

(#18)

---

18 OCT 87
4 Lr. S London.
341 CRUTTENDEN

Plasma

Tree 18m × 25 cm dish
Pipe 1.5to to 1m
Bark grey with longitud
cracks and grooves 5mm thick
w/ bead rim.

Fruit 2 lobed, scalloped
reddish brn, 10 mm diam
style persistent

TBT, TJ, LF (3)

346 OXYRRHYNCHUS

Woody climber, ste 6 cm dia.
Flowers in axillary pairs old wood, calyx dull green with dark red top.

STM(BK-WO), TW, LF (3)

347 ANNONACEAE

Desmos

Woody climber, ste 2-3 cm dia!
Fruit c. 6 free carpels on 10 mm long stalk, purplish with glaucous bloom

STM(BK+WOM), TW, LF, FR (3-4)

348 SPERMATOPHYTA

Pinaceae

Taxus B [illegible] 15 cm dbh

[illegible] bk [illegible] scaly, tubercul-
ate, 1/4 cm thick
w/bk orange, white latex
Foliage, in [illegible]
K 4 [illegible] ; style, 10 mm,
[illegible], persistent, fr.
ovoid, green 5 mm dia
TNF, TN, LF (3)

349 ARACEAE (8)

Willoughbia

Woody climber, stem 2 cm
white latex

Flow , schizo , tube
7 mm , yellow .

Fruit (?) 2 berries , 9 cm
long x 3 cm dia green
+ yellow.

LF ; + TW + STem(OK = NO) (1)

350 LINACERE

Cleistogenes parviflora

Litoh

Tree 20m x 25m dbh

Bark hoop with fruit
dense / with wings 6 mm
Fruit , chipped , papery
with persistent 1 lobed
style , compressed , 15 mm
long

TBR . Tax , Lin Fruit -

351 [illegible]

Calcisiltite

Trace 8 m x 15 m thick

Base light brown [illegible]
dark brown [illegible]
[illegible]
[illegible]

Fossil [illegible] c 10 mm diam
[illegible]

TCR, TCU, LF, (FC) (3)

352 FINE CLAY

Lithocorpsis

Trace 15 m x 25 m thick

Base grey with reticulate
grooves
u/b red, 4 mm thick

Fl... [illegible] ... Collego
[illegible]

TBR, TJ, LF (3)

353 ICACINACEAE

? Gomocaryum / Gomphandra

Tree 25m x 40cm dbh
Trunk fluted to 2m

Bark grey with fine longitudinal cracks ± scaly. 6mm thick. w/bk orange

Fruit orange-pink oblong 20mm x 8mm

TBR, TJ, LF, FR (4)

(434)

19 OCT 1987

Setayan area ; 10 km
S of Sematan
1° 44' N 109° 45' E
20'

Kampung forest on hill
canal

354 MYRTACEAE

Unidentified

Tree 18 m x 45 cm dbh
o/Bark stone-grey, peeling.
inner bark
b/ bark orange, soft, stringy.
5 mm thick
Fruit ovoid-conical 6-7 mm dia
K(s) persistent ; shiny red,

Flowers C(5), white, waxy
30 mm ½ in
TBR, LF, TW, FR (4)

355 DIPTEROCARPACEAE

Hopea

Tree 15m × 20cm dbh
Bark mottled grey & brown
slightly rugose
u/bk yellow 4mm thick
Flowers minute 1-2mm dia
green with reddish hairs
TBR, TW, LF (3)

356 LORANTHACEAE

? Loranthus / Plaicosolen

(Woody shrub, parasitic
on Vatica sp.) (Dipterocarpaceae)

h/FL: orchid-red to yellow-green
buds, yellow-green
flowers, [illegible] Lobes 15 mm
Fig. C(6)

TH, LE, FL, Stem (Stem)
(4)

357 FAGALES

Lithocarpus

Tree 12 m x 13 cm dbh

Bark grey with longitudinal
& reticulate grooves

Ybk [illegible], < 5 m

Flowers, spikes, 4 mm
Cl on stk, yellow green

TBK, TW, LF, FL (4)

358 DIPTEROCARPACEAE

Shorea

Tree 12m x 16 cm dbh

Bark, dark-brown, o/buck
flaky, u/bk yellow
5 mm thick

Flowers 1-2 mm, green

TBK, TW, LF (3)

359 GUTTIFERAE

Mesua

Tree 18m × 25cm dbh

Bark yellowish-brown flaking, whole canopy 5mm thick

Fruit [illegible] plant, [illegible] mm

Leaves 25 [illegible]

[illegible] TBH, TL, LF, FX M)

360 ANNONACEAE

Tree 13m × 15cm dbh

Bark brown with fine longitudinal cracks

No. 312

Flower:

K 3 green 3-4mm dia

C 3 green, mostly tubular 10-15 mm long, irregular

TBH, TW, LF. (3)

361 SAPOTHACEAE

Palaquium

Tree 18 m x 25 cm dbh

dark

Bark reddish brown, soft, deep longitudinal fissures, peeling, in

w/bk. pinky red,

White latex exudate

Fruit ellipsoid, green

15 mm dia

TBH, TW, LF, FR (4)

(463-3)

J. L. DARLING CORP TACOMA, WA 98421

Rite in the Rain WEATHERPROOF

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No. 312

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